APPENDIX A

Inputs: transmitted_signal(1), received_signal (2)

Output: output_signal going to the network (3)

5   Start:

Calculate the power of the signal to be broadcast by the handset speaker;

AbsY = (1-alpha)AbsY + alpha*abs(transmitted_signal);

Chose the mask that corresponds to the power of the signal to be broadcast by the handset speaker;

10   Mask = Mask_select(AbsY);

Output_signal = received_signal AND Mask;

Go to Start;

where:

15   transmitted_signal is the signal received by the telephone device to be broadcast by the handset speaker;

received_signal is the echo signal picked up by the handset microphone and voice signals picked up by the handset microphone;

alpha is an IIR filter parameter; and

20   Output_signal is the signal output to the network by the telephone device.

APPENDIX B

Power Level Calculation Routine

```
5   if AbsY > AbsY0
            AbsY=(1- alpha_slow)*AbsY + alpha_slow *AbsY0;
        else
            AbsY=(1- alpha_fast)*AbsY + alpha_fast *AbsY0;
        end
10
```

Mask Selection Routine

```
        Mask_select:
                Mask = 64512;       %fc00 or 10 zeros   (1111110000000000)
15          if AbsY < 4063
              Mask = 65024;       %fe00 or 9 zeros
            end
            if AbsY < 2031
              Mask = 65280;       %ff00 or 8 zeros
20          end
            if AbsY < 1015
              Mask = 65408;       %ff80 or 7 zeros
            end
            if AbsY < 507
25            Mask = 65472;       %ffc0 or 6 zeros
            end
            if AbsY < 253
              Mask = 65504;       %ffe0 or 5 zeros
            end
30          if AbsY < 126
              Mask = 65520;       %fff0 or 4 zeros
            end
            if AbsY < 63
              Mask = 65528;       %fff8 or 3 zeros
35          end
            if AbsY < 31
              Mask = 65532;       %fffc or 2 zeros
            end
            if AbsY < 15
40            Mask = 65534;       %fffe or 1 zero
            end
```